

ABB BALDOR RELIANCE III

Customer information packet

ECP44304TR-4

300HP, 1785RPM, 3PH, 60HZ, 449T, A44152M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	300.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	30-60
Current @ Voltage	334.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T2C
Heater Indicator	No Heater
High Voltage Full Load Amps	334.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2/0 AWG

Part Detail

Revision	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG1556
Layout	617427-003
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	04
Leads	3#2/0 (02 per group)
Proprietary	False
Created date	08-16-2012

Motor Standards	Other
Motor Type	A44152M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	53.24 IN
Power Factor	88
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238													
CAT NO	ECP44304TR-4			SPEC NO.		P44G3955							
HP	300	AMPS	334	VOLTS		460			DESIGN	B			
FRAME	449T	RPM	1785	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	NU222		O.D.E. BRG.DATA			6318		PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	110RU02M30X			TYPE	P	ENCL	TEFC	CODE	G				
O.D.E. BRG.	90BC03J30X			POWER FACTOR			88	NEMA NOM EFFICIENCY			96.2		
3/4 LOAD EFF.	96.6	MAX CORR KVAR			52.0		GUARANTEED EFFICIENCY			95.8			
TEMP CODE	T2C	TEMP =	230										
CHP HZ	60-90	CT HZ	30-60		VT HZ	0-60							
INVERTER-TEMP-CODE	T2C												
SER.NO.				MOTOR WEIGHT									

NP2496L	
MOBIL SHC -220 GREASE	

Parts List

Part number	Description	Quantity
SA249725	SA P44G3955	1.000 ea
RA236585	RA P44G3955	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
000692000FF	N/P	1.000 ea
000692000RT	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
004824015AP	GREASE MOBILITH SHC 220	1.156 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
078549001DA	FAN 400 078549001F	1.000 ea
083199082RA	G28 SHORT FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
415045002A	SLGR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
418151014G	RETAIN RING	1.000 ea
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea

034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
089490101A	G28 BRKT 089490100WCA	1.000 ea
415915007G	GASK, LAC	1.000 ft
415045002D	SLGR - 440 V1T45B	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
418151014H	RETAIN RING	1.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053014A	GASK 440	1.000 ea
076870000BA	CONDUIT BOX - 440 - 1/2-13 GROUND	1.000 ea
076871000A	+CBOX CVR BLKT - 449	1.000 ea
406056007A	GASKET, 440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.094 ga
L482401016	SPRAY AC-29-7S	0.013 ga
421948051	LABEL, MYLAR	1.000 ea
PK5005A01	WOODEN BASE 449, 60 X 41-1/2	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
412118006A	DRAIN	2.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	300	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
334	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
833164	418143050ZE	---	---	.0130		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	89.8	1800	3.18	0	
1/4	75.1	130	1796	56.9	95.3	
2/4	150	187	1792	77.7	96.6	
3/4	225	257	1788	84.8	96.6	
4/4	300	334	1784	87.5	96.2	
5/4	375	416	1779	88.2	95.7	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	154	1358	2185	
PULL UP		342	146	1290	2073	
BREAKDOWN		1727	290	2564	1198	
FULL LOAD		1784	100	883	334	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: TYPICAL DATA NEMA NOM. EFF. - 96.2% GUAR. MIN. EFF. - 95.4%						
		DR. BY J.J.HARRISON		A-C MOTOR PERFORMANCE DATA A44WG1556-R001 ISSUE DATE 12/18/20 Page 8 of 13		
		CK. BY T.G.KELATI				
		APP. BY T.G.KELATI				
		DATE 06/03/10				

REL S.O.

 RPM **1785**

 S.F. **1.15**

 ROTOR **418143050ZE**

 FRAME **449T**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **300**

 AMPS **334**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

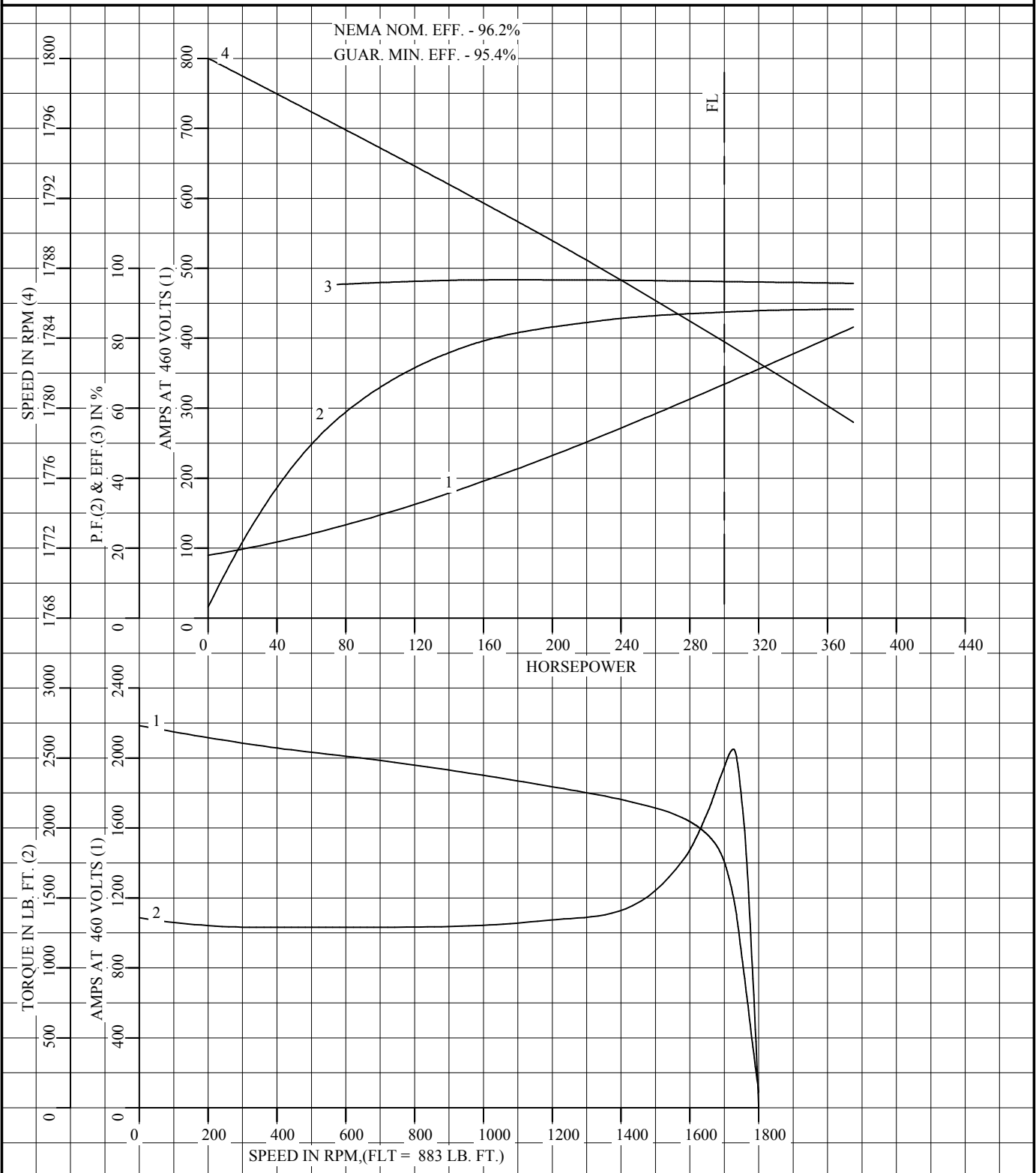
 STATOR RES. @ 25 °C **.0130**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **833164**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY J.J.HARRISON
CK. BY T.G.KELATI
APP. BY T.G.KELATI
DATE 06/03/10

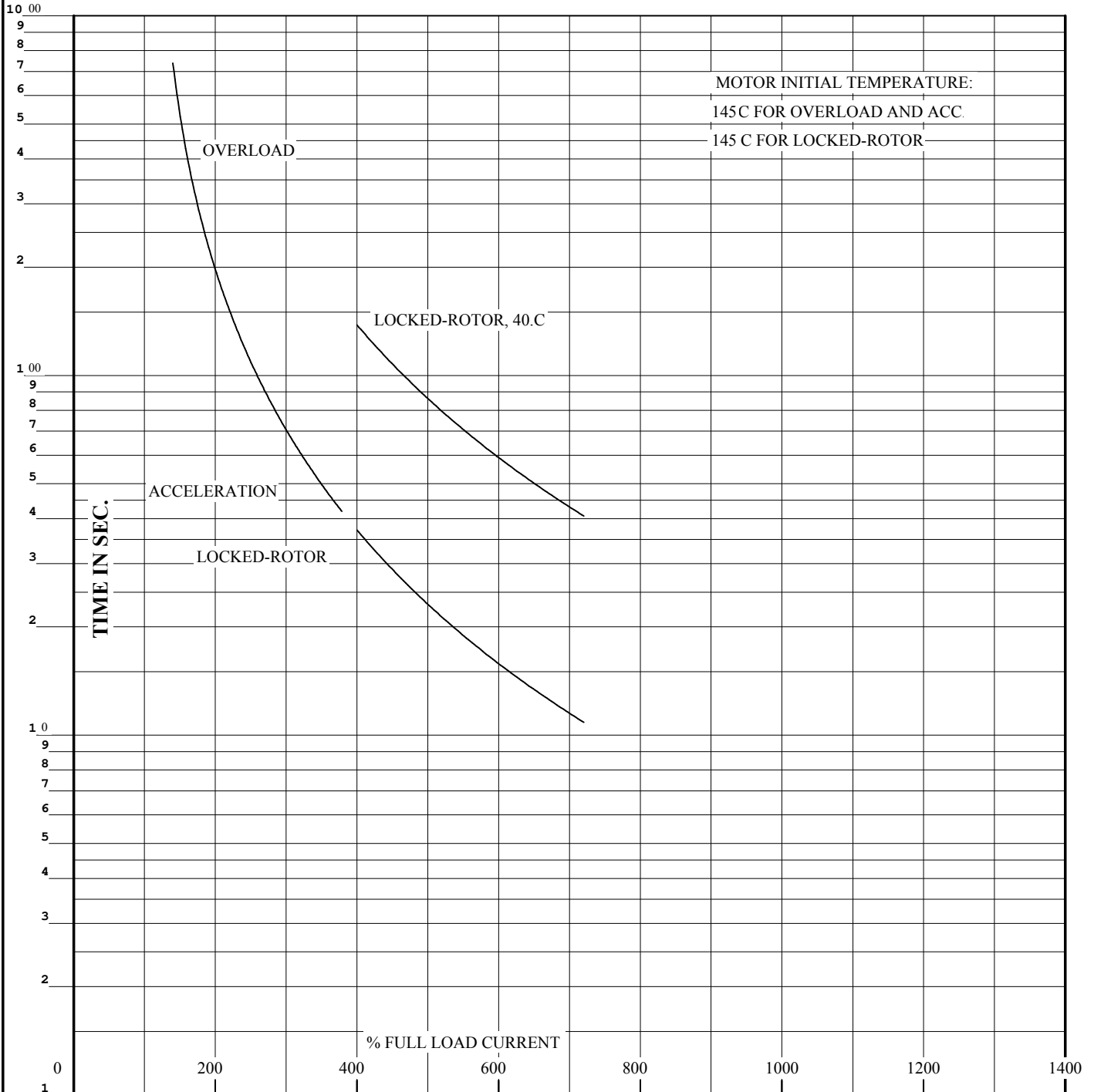
**A-C MOTOR
PERFORMANCE
CURVES**

A44WG1556-R001

ISSUE DATE **12/18/20**

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REL. S.O.	RPM 1785	S.F. 1.15	ROTOR 418143050ZE
FRAME 449T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 300	AMPS 334	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0130
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 833164	OHMS (BETWEEN LINES)


THERMAL LIMIT CURVE

REMARKS:

NEMA NOM. EFF. - 96.2%

GUAR. MIN. EFF. - 95.4%

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY	J.J.HARRISON
CK. BY	T.G.KELATI
APP. BY	T.G.KELATI
DATE	06/03/10

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG1556-R001

ISSUE DATE 12/18/20 Page 10 of 13

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

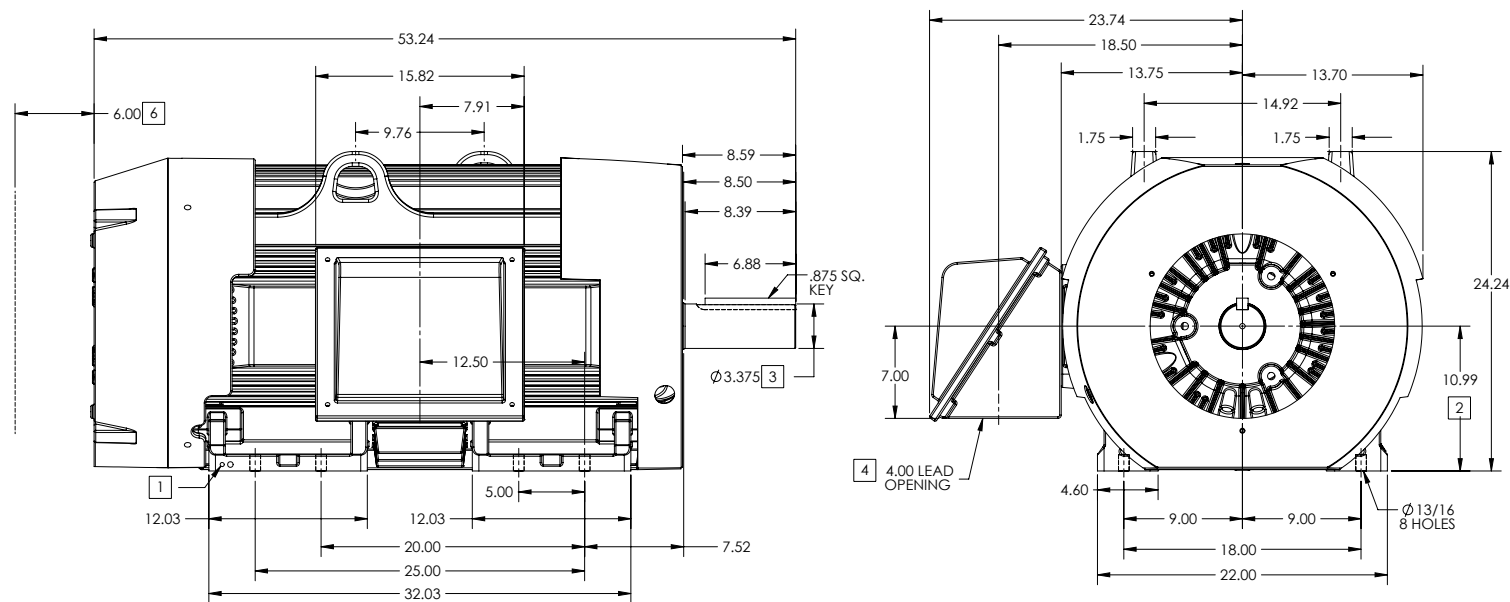
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00-.06
3. VARIES +.000-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

 SHEET NUMBER
1 OF 2

500P-LCP-119

REV. DESC: NEW DRAWING	REV. B	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003	BY: RAGRA			

BALDOR

G449T/447T STD - FOOTED - SIDE/CENTER C/B

617427-003

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

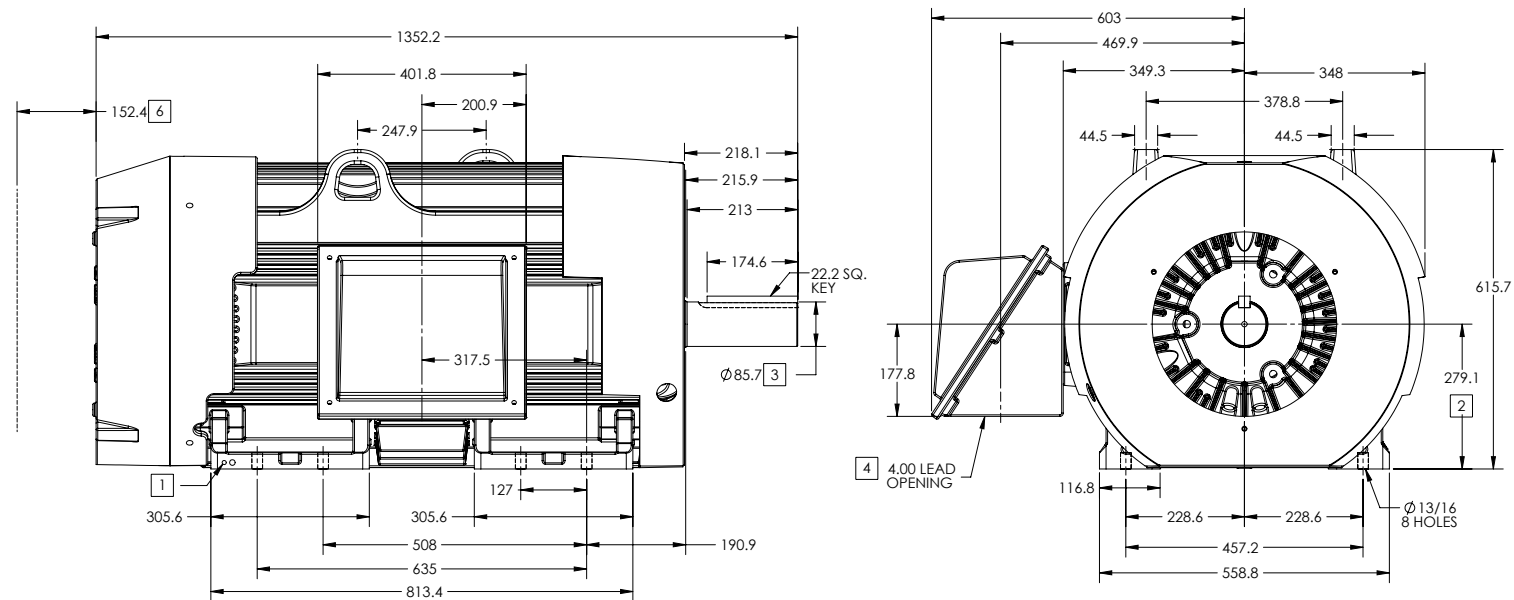
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00, -.06
3. VARIES +.000, -.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 1400

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

 SHEET NUMBER
2 OF 2

500P-LCP-119

REV. DESC. NEW DRAWING	REV. B	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003	BY: RAGRA			

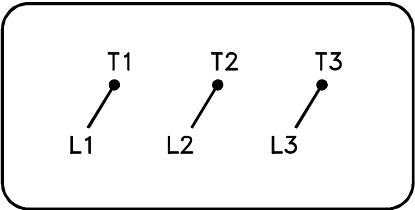
BALDOR

G449T/447T STD - FOOTED - SIDE/CENTER C/B

617427-003

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1